



<b>Catalog Number:</b>	MC11092	<b>Product Type:</b>	Small Molecule
<b>Bio-Activity:</b>	Na <sup>+</sup> K <sup>+</sup> ATPase inhibitor	<b>CAS #:</b>	11018-89-6
<b>Research Categories:</b>	Stem cells, cancer stem cells, hypertension, cancer	<b>Chemical Name:</b>	3-[(6-Deoxy- $\alpha$ -L-mannopyranosyl)oxy]-1,5,11 $\alpha$ ,14,19-pentahydroxycard-20(22)-enolide octahydrate
<b>Solubility:</b>	Soluble in DMSO (up to 50 mg/ml), or in Water (up to 10 mg/ml).	<b>Molecular Formula:</b>	C <sub>29</sub> H <sub>44</sub> O <sub>12</sub> · 8H <sub>2</sub> O
<b>Purity:</b>	> 98%	<b>Molecular Weight:</b>	728.8
<b>Format:</b>	Powder	<b>Ship Temp:</b>	Ambient
<b>Storage:</b>	-20°C		

### Application Notes

#### Description/Data:

Selective inhibitor of Na<sup>+</sup> K<sup>+</sup>-ATPase isolated from *Strophanthus gratus* [1]. Endogenous ouabain is found in human circulation [2]. Displays cardiotonic and diuretic activity. May be used to induce hypertensive rat model. Cell permeable and active in vivo.

#### References:

- 1) Silva et al. (2012), New insights into the regulation of Na<sup>+</sup>,K<sup>(+)</sup>-ATPase by ouabain; *Int. Rev. Cell. Mol. Biol.*, 294 99
- 2) Dvela et al. (2012), Endogenous ouabain regulates cell viability; *Am. J. Physiol. Cell, Physiol.*, 302 C442

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